

SHADES OF GRAY



VIEW THE SEA THROUGH THE CAMERA'S LENS

Gray's Reef Sponsors the Savannah Ocean Film Festival

Man-**M**ankind's relationship to the marine environment is the theme of the Savannah Ocean Film Festival to be held in Savannah Sept. 10-12. The goal of the free festival, sponsored by Gray's Reef, is to educate, inspire, entertain and foster a spirit of ocean stewardship through the screening of films that explore our relationship with the sea.

A highlight of the film festival will be the screening of "Proteus," a film by David Lebrun. "Proteus" premiered at the 2004 Sundance film festival and was the winner of best documentary at the 2004 Philadelphia and Santa Cruz film festivals.

The animated documentary explores the 19th century's engagement with the undersea world through science, technology, painting, poetry and myth. The central figure of the film is biologist and artist Ernst Haeckel who found in the depths of the sea and ecstatic and visionary fusion of science and art.

Haeckel discovered, described and painted 4,000 species of the tiny, one-celled undersea organism called radiolarian. They are among the earliest forms of life and in their intricate skeletons Haeckel saw the



future possibilities of organic and created form.

A review from Variety says, "Lebrun makes us contemplate the majestic vastness of the natural universe and its complex artistic perfection in ways that even Haeckel could only have imagined."

Continued on page 2

Red Fish, Blue Fish: It's Underwater Art in the Park

It was more muses than fishes for Gray's Reef in April.

Some 80 artists took the sanctuary's challenge and created underwater environmental scenes in chalk for the Fantastic Fishes Art Contest,



Sanctuary manager Reed Bohne (right) presents the Gray's Reef Fantastic Fishes Art Contest prize to Amiri Farris.

part of the 2004 Savannah College of Art and Design's Sidewalk Arts Festival.

The winners, Katie Spady, Hinesville, Ga., in the Prospective Student Category; Amiri Farris, Savannah, Ga., in the Alumni Category and Kelly Frasier, Whitesburg, Ky., in the Student Category, got their inspiration from the beautiful world under the sea.

Farris, a Savannah art teacher, said even though he never visited Gray's Reef it was important to him that the marine environment be protected and preserved. In fact, many of the chalk art entries presented themes of ocean protection. Farris' colorful, Caribbean-styled turtle drawing was inspired by the threatened loggerhead sea turtles that use Gray's Reef for resting and feeding.

Students, prospective students and alumni from the Savannah College of Art and Design used colored chalk to draw on the sidewalks around Savannah's Forsyth Park at the festival. Each year the festival unleashes a surge of creative energy. This year, more than 500 artists worked on the ephemeral artworks; at least 80 of them entered the Gray's Reef Fantastic Fishes Art Contest.

In just a few hours the chalk artists created lavish underwater scenes filled with sea turtles, fish, divers and they created scenes with a message to keep our ocean and other waterways clean.

As they worked, an estimated 10,000 people - senior citizens, tourists and parents with toddlers in tow - strolled by. Sometimes, so many people jammed the sidewalk that the line-and-judging-came to a halt. But they liked the temporary art, a lot.

Continued on page 2

Editor

Gail Krueger

Sanctuary Manager

Reed Bohne

Photography

All photos copyright GRNMS unless otherwise noted.

Line drawings

All line drawings copyright GRNMS unless otherwise noted.

Unless specifically stated, the views expressed in this issue do not necessarily reflect the opinions of the Gray's Reef National Marine Sanctuary, the National Marine Sanctuary System or NOAA.

We welcome comments and will consider publication of items submitted by readers as space permits.

Comments and articles should be sent to:

Gail Krueger
Gail.Krueger@noaa.gov
10 Ocean Science Circle
Savannah, Ga 31411

GRAY'S REEF STAFF

Sanctuary Manger

Reed Bohne

Administrative Coordinator

April Fendley

Executive Officer

Peter Fischel

Outreach Coordinator

Gail Krueger

Science Coordinator

Greg McFall

Education Coordinator

Cathy Sakas

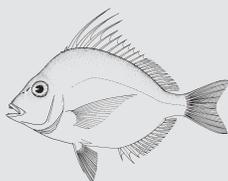
Policy Coordinator

Becky Shortland

Regional Projects Coordinator

Jim Sullivan

Printed on recycled paper with soy-based inks.



Teachers Go to Sea for Science

Teachers became students aboard the *Research Vessel Savannah* this summer as part of an intensive week-long workshop sponsored by Gray's Reef, the Savannah-Chatham County School Board and the Oatland Island Education Center.

Ten teachers from all around Georgia gave up a week's worth of vacation time in exchange for a chance to dip their hands into coastal and marine sciences. They walked the beach at night in search of sea turtles, they paddled along the Altamaha River and they spent a day at the sanctuary taking water quality samples and learning how to operate a ROV (remotely operated vehicle).

The goal of the week was to help teachers bring science back into their classrooms in a more meaningful way. Each program participant will create several lesson plans based on their experience.

Continued from page 1, Red Fish Blue Fish

"I was delighted with the response to the Fantastic Fishes Art Contest," said Sanctuary Manager Reed Bohne. Bohne was the judge for the Fantastic Fishes Art Contest.

This was the first year Gray's Reef sponsored a prize in the popular event. The art contest provided a way to get dozens of people--some of whom might not routinely spend much time thinking about the ocean-- to think about the marine environment as a source of inspiration for their art and for thousands of visitors to see ocean-inspired art work.

"We are always searching for new ways to engage the public and to share the wonders of Gray's Reef with the community," Bohne said. "The Fantastic Fishes Award helps us build new partnerships with young creative students while drawing the public's attention to the sanctuary in a new way."

The three winning entries are now posted on the Gray's Reef website at <http://graysreef.noaa.gov>. Later, all 80 entries will be posted. All winning entries are now posted on the SCAD website at <http://www.scad.edu/saf/>



Way Cross, G.A. teacher, Mary Parrott, learns to operate an ROV as the crew of the *R/V Savannah* look on.

"Nothing beats being able to give your students a hands-on lesson plan. Being able to talk about these kinds of instruments because I've had my hand on them gives me greater credibility in the classroom," said Jeri Reining, an Atlanta area teacher.

The teachers not only got a chance to operate the Gray's Reef ROV, they each received a DVD of their view of the livebottom to take back to the classroom.



Continued from page 1, Film Festival

Two films produced by undersea explorer Jean-Michel Cousteau--"Keiko: Born to be Wild" and "Keiko: The Gate to Freedom"--will also be screened. Neither film, both based on the life of the killer whale of "Free Willie" fame, has been shown in the U.S before. In addition, Bob Talbot's film "Oceanmen," the story of two men and their attempt to free dive deeper than anyone has ever dared--more than 500 feet on a single breath of air-- will be shown.

The Savannah College of Art and Design's Trustees Theater on Broughton Street will be the venue for most of the three-day film festival.

A special children's day of videos, popcorn and exploration will be presented Sunday at the Tybee Island Marine Science Center.

Programs in the Gray's Reef Ocean Film Festival will be free to the public.



Commerce Official Visits Gray's Reef, Gives Environmental Hero Award to Bob Williams of University of Georgia

Marine education got a special boost Earth Day 2004 when Theodore W. Kassinger, Department of Commerce General Counsel and Deputy Secretary visited Gray's Reef National Marine Sanctuary and the Skidaway Institute of Oceanography.

Kassinger presented a NOAA Environmental Hero award to pioneering marine educator Bob Williams of the University of Georgia Marine Education Center and Aquarium (MECA). Williams directs the Distance Learning Program at the aquarium. Through his work, Williams has enabled more than 5,000 students from across the country to learn about Gray's Reef and the coastal environment in their own classrooms. The staff of Gray's Reef nominated Williams for the award.

Kassinger also announced that the Commerce Department, through the National Oceanic & Atmospheric Administration and the National Marine Sanctuary Program will award \$100,000 to the aquarium to upgrade its exhibits about Gray's Reef National Marine Sanctuary and Georgia's coastal environments.

"This grant is part of the National Marine Sanctuary Program's long-term plan to better educate Americans about our treasured natural resources. MECA is a leader in this field, and well deserves the continued support provided by this new grant," Kassinger said.

Following Kassinger's remarks, Lenett Richardson, representing Congressman Jack Kingston, spoke about the importance of marine education in coastal Georgia. Eric Betts, regional representative of Senator Saxby Chamblis' office, and Jared Downs, regional director of Senator Zell Miller's office, were also on hand and participated in the ceremony.



Deputy Theodore W. Kassinger (left) presents the NOAA Environmental Hero Award to Bob Williams

The NOAA Environmental Hero Award was established in 1995 to commemorate the 25th year anniversary of Earth Day. This prestigious award is presented to individuals and organizations that volunteer their time and energy to help NOAA carry out its mission. Previous recipients include esteemed oceanographers Jean-Michel Cousteau and Sylvia Earle.



Workshop Held to Explore Possible Sanctuary Research Area

Gray's Reef hosted a workshop for the Sanctuary Advisory Council working group that is investigating a possible recommendation to create a research area at the sanctuary.

The two-day workshop was the kickoff meeting of the 18-member working group, consisting of council members, regional scientists, and representatives of the fishing and diving communities. Its purpose was to help define the concept, identify the scientific needs for a research area, and identify several possible design options. Paul Orlando of the National Marine Sanctuary Program facilitated the meeting.

Though a wide range of scientific needs were noted, the effects of bottom and pelagic fishing activities (e.g., recreational fishing and spear fishing), diver impacts, and natural variability of large-scale physical and biological processes were identified as among the highest priorities. To help address these scientific needs, five preliminary options for placement of a research area or areas were identified—they included research areas within and outside of the sanctuary boundary.

All ideas developed during this workshop are drafts only.

The research area concept will be revisited during a second workshop in October 2004 that will focus on the design of a research area, including appropriate placement, size, number, and statistical considerations, for different

scientific purposes. At that time, the working group will decide whether or not to recommend to the full council that a research area be established. The council would then consider the recommendation of its working group and make a determination for their recommendation to GRNMS management. Such an area, if it were to be adopted, would be a first within the Sanctuary Program and would likely take until 2007 to clear public process and National Environmental Policy Act requirements.

No recommendation on creating a research area can move forward without a full public input process including scoping meetings and public comment sessions.



Meteorologists Visit NOAA Ship *Nancy Foster* During Science Cruise in the Sanctuary

It was a day of calm seas and smooth sailing—just as forecasted—when a crew from the National Weather Service's Charleston field office visited Gray's Reef and the NOAA ship *Nancy Foster* during a science cruise.

The Charleston weather service office issues the marine forecasts that cover Gray's Reef and coastal Georgia. The trip to the *Nancy Foster* was a chance for meteorologists Jerry Harrison, Hal Austin, Vern Beaver and office administrator Beverly Rightmire to get better acquainted with the area and to get a look at the science done aboard the *Nancy Foster* while she was on station in the sanctuary.

"We'll all have a better appreciation of making our forecasts when we are on the marine desk after this trip," Austin, who used his day off to the make the trip, said.

The information from the National Data Buoy Center's buoy

([http://seaboard.ndbc.noaa.gov/station_page.phtml?\\$station=41008](http://seaboard.ndbc.noaa.gov/station_page.phtml?$station=41008)) in Gray's Reef is one of the elements that go into creation of the area marine forecasts, Austin said. In addition, the crew of ships like the *Nancy Foster* is trained to make accurate meteorological observations that help supplement the marine forecasts, especially when hurricanes or other storms are in the area. Gray's Reef's own boat captains, Peter Fischel and Keith Golden, were asked to provide the Charleston weather service office with information on water spouts—should they see any.

"Nothing beats having more eyes out there," Austin said.

The first leg of the *Nancy Foster* cruise aimed to compare historical and burgeoning fisheries assessment techniques in the same temporal and spatial scales at Gray's Reef. Six different assessment techniques were conducted at 10 independent sites per method in areas known to have

high fishing activity and at ten sites with less fishing activity. The cruise was a resounding success and the data will be compiled into reports as it is analyzed. Scientists from NOAA Fisheries, REEF, NASA, South Carolina DNS, University of Georgia, project Oceanica and the National Undersea Research Center (NURC) were part of the collaborative effort.

Elizabeth Rogers of Project Oceanica, wrote daily logs for high school and undergraduate audiences about the science being conducted on the cruise. These logs were updated frequently and you can read them at Project Oceanica's website at www.oceanica.cofc.edu/home.htm. Click on "Gray's Reef Expedition," then "Daily Logs."

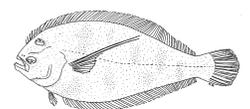
The second leg of the cruise was in support of a new investigation into invertebrate recruitment processes, continued work on the web-based invertebrate identification guide and collection of sponge specimens for genetic identifications. Scientists from Georgia Southern University, The University of Alabama at Birmingham and EPA Region IV were part of the effort.

In addition, Gray's Reef volunteer Russ Wigh continued his studies of the pelagic birds found feeding at the Sanctuary from the deck of the *Nancy Foster*.

Bringing guests like the meteorologists to the *Nancy Foster* while she is underway on a science cruise is an important way to engage members of the community, to make them aware of the many types of work done in the sanctuary and the variety of uses that are balanced within the management of the sanctuary.



Meteorologists Hal Aulaustin and Vern Beaver look over the *Nancy Foster*.



SAFETY WEEK

A week-Long Safety Drill Prepares Sanctuary Staff For Operations on Land and Sea

Gray's Reef took safety to heart this spring with all eight staff members participating in an intense week's worth of hands-on safety programs.

Led by NOAA Corps officer Lt. Peter Fischel and science coordinator Greg McFall the entire sanctuary staff did everything from don full immersion suites and jump off a dock to simulate an emergency boat evacuation to fight small fires in the parking lot. Dana Wilkes and Pam Plakas from the sanctuary small boats program were on hand to observe the exercises.

"This week of safety training has been an opportunity for team-building as well as an important commitment to safety," said Sanctuary Manager Reed Bohne.

The exercises took place just before the Gray's Reef field season began so there was particular emphasis on diver and boat safety. Each staff member was trained and certified by McFall in First Aid, CPR, diver accident management and oxygen administration. McFall also reviewed dive accident prevention, management and response with the entire staff, some of whom are non divers. Fischel went over safety equipment and procedures on both the *R/V Joe Ferguson* and the sanctuary patrol boat.

"The entire program made me feel that, I, too could help in a dive or other emergency on either of the boats," said Policy Coordinator Becky Shortland. Shortland and other non-diving members of the



Gray's Reef Science Coordinator Greg McFall helps another staff member into an emergency raft during a safety drill.

Gray's Reef staff often go out with Fischel and McFall as assistants and observers on both research dives and routine patrols.

The highlight of boat safety operations was when all staff members pulled on the bright orange immersion or "Gumby" suits and jumped off a two story high dock into the water. Each orange-clad staffer then drifted toward a deployed 10-person life raft and practiced getting into the raft.

Later in the week, the Gray's Reef staff did a walk around of the sanctuary office build-

ing reviewing fire alarms, escape routes, hazardous materials protocol and safety lighting. Small fires of scrap paper were lit in the parking lot so staff could get experience using a variety of types of fire extinguishers.

Throughout the week, routine work was set aside so the staff could focus on important safety issue. Not only was it worthwhile, the Gray's Reef staff is looking forward to safety week next year.



A New Poster Is Added to the Gray's Reef Educational Series

A new poster, "Seamonsters In The Sand" depicts the amazing tiny creatures that live under the sand in the sanctuary. These creatures are the basis of the elaborate food chain that supports the life in the reef and in the sanctuary. There is also a new website devoted to additional information on this hidden world, <http://www.seamonsters.noaa.gov/>



NOAA's Gray's Reef National Marine Sanctuary

SHADES OF GRAY

10 Ocean Science Circle
Savannah, Ga 31411
graysreef.noaa.gov



About Gray's Reef National Marine Sanctuary

NOAA's Gray's Reef National Marine Sanctuary was established in 1981 to protect one of the largest nearshore live-bottom reefs of the southeastern United States. The Sanctuary is located about 17 miles off Sapelo Island, Georgia and encompasses 17 square nautical miles.

An estimated 160 species of fish have been recorded at Gray's reef; approximately 30 species spawn there. The ledges and overhangs of the reef serve as resting and foraging areas for the loggerhead sea turtles (threatened species) which nest on nearby barrier islands. The Sanctuary is near the critical habitat and only known calving ground for the highly endangered Northern right whale. Pelagic sea birds and shore birds feed on schooling baitfish within Sanctuary waters. The Sanctuary is well known to the recreational divers and fishers who visit it.

The mission of the National Marine Sanctuaries Program is to serve as the trustee for the nation's system of marine protected areas to conserve, protect and enhance their bio diversity, ecological integrity and cultural legacy.

For more information,
contact NOAA's
Gray's Reef National Marine
Sanctuary offices at
10 Ocean Science Circle,
Savannah, Ga 31411,
912 598-2345. Visit us at
www.graysreef.noaa.gov

